

**Table 16. GT0-GT10 events relocated using Pn and Sn phases with and without SSSCs**

| evid                              | date       | time       | lat    | lon   | depth | mb | ml | GT | data source | n-def | n-sta | n-Pn | n-Sn | gap   | min dist | max dist | C  | D  | Diff-dist | Diff-area | with-dist | with-area | cw | cwo |
|-----------------------------------|------------|------------|--------|-------|-------|----|----|----|-------------|-------|-------|------|------|-------|----------|----------|----|----|-----------|-----------|-----------|-----------|----|-----|
| <b>Figure 16: Pyrenees events</b> |            |            |        |       |       |    |    |    |             |       |       |      |      |       |          |          |    |    |           |           |           |           |    |     |
| 1075115                           | 1997/07/02 | 03:20:02.7 | 42.655 | 0.673 | 3.4   |    |    | 5  | ROCA        | 14    | 11    | 11   | 3    | 102.2 | 1.2      | 2.5      | C1 | D1 | 0.6       | 326.7     | 0.3       | 480.2     | 1  | 1   |
| 20585797                          | 1999/10/04 | 18:14:26.4 | 42.889 | 0.629 | 10.6  |    |    | 5  | ROCA        | 14    | 13    | 12   | 2    | 96.1  | 1.0      | 2.6      | C1 | D1 | 0.9       | 358       | 2.0       | 482.7     | 1  | 1   |

evid: event ID.

date, time, lat, lon, depth, mb, ml: GT information on the event.

GT: GT category of the event. GTX means location accuracy better than X km.

data source: data source for the origin information and sometimes for the arrival information as well (e.g. ENGDAHL\_HDC, ISRAELSSON\_JHD).

n-def: Number of defining phases.

n-sta: Number of defining stations.

n-Pn: Number of defining Pn phases with SSSCs.

n-Sn: Number of defining Sn phases with SSSCs.

gap, mindist, maxdist: azimuthal gap and minimum/maximum epicentral distance (in degrees)

C: Class C, defined based on locations relative to the GT accuracy

D: Class D, defined based on locations relative to 18 km mislocation

diff-dist: GT distance without SSSCs minus GT distance with SSSCs (km). Positive numbers indicate improvement.

diff-area: Ellipse area without SSSCs minus area with SSSCs (sqkm). Positive numbers indicate improvement.

with-dist: GT distance with SSSCs (km).

with-area: Ellipse area with SSSCs (sqkm)

cw: coverage with SSSCs. 1- covered; 0: otherwise

cwo: coverage without SSSCs. 1- covered; 0: otherwise